

New Abstract

The invention provides a method to compensate for degradation in a tunable laser and ensure its performance by tracking the degradation and adjusting the control information accordingly. This is accomplished by performing some measurements of the output of the tunable laser at an initial setup or calibration procedure. Then, by effecting a periodic repetition of these measurements and using a comparison between these two measurements the present invention provides for a compensation factor for the operating conditions, primarily in the form of a look up table of operating points of the laser. These measurements show how much the operating points of the laser have drifted over the period since the last set of measurements, which provide control information to compensate for degradation in the laser.